

# VARNISH! MICHIGAN BABIES TOO!



2014-2015

Annual Report



The Varnish! Michigan Babies Too! Program was developed to encourage medical providers to receive oral health training, perform oral health screenings, apply fluoride varnish and provide guidance to parents during well child visits. The following report contains the data from the 2014-2015 year

# Varnish! Michigan Babies Too!

## ANNUAL REPORT

### **Introduction to Oral Health**

Oral health is defined as a functional, structural, aesthetic, physiologic and psychosocial state of well-being and is essential to an individual's general health and quality of life according to the American Dental Association. Increasing evidence links oral health to overall health and poor oral health can lead to a variety of diseases. There are many factors that influence the oral health of individuals-including limited access and availability, lack of education regarding oral health, cost, and many social determinants including income, education level, and race or ethnic group. In the Healthy People 2020 report, increasing the proportion of children, adolescents, and adults who use the oral health care system is considered one of the 12 leading health indicators. The goal for this indicator is to increase the percent of people over the age of 2 that have a dental visit during the course of a year by 10 percent. The Varnish! Michigan Babies Too! Program aligns with this goal by increasing oral health screenings in primary care settings and to help establish dental homes for babies by the age of one.

### **Background Information**

Tooth decay is one of the leading chronic diseases in children in the United States. According to the 2014 CDC National Health and Nutrition Examination Survey, 17.5 percent of children ages 5 to 19 had untreated dental caries in 2011-2012. Dental disease can be attributed to more than 51 million lost school hours for children each year. Although tooth decay is a problem, it is preventable. One method used to prevent tooth decay is the use of fluoride varnish. Fluoride varnish can be applied to the teeth of infants and small children by their medical provider during well child visits. Once applied, the varnish is effective for many months. Varnish applied at least twice a year has shown to prevent around 33 percent of tooth decay in primary teeth and can be applied up to 4 times a year on high risk children.

### **Training**

Medical providers, including physicians, nurse practitioners, LPNs, PAs and RNs, which wish to provide oral health screenings and varnish applications must complete the Smiles for Life Course 6: Fluoride Varnish module, which is endorsed by the American Academy of Pediatrics. This is mandatory training if their agency wishes to bill Michigan Medicaid for services provided and participate in the Babies Too! Program. This training can be accessed at

[www.smilesforlifeoralhealth.com](http://www.smilesforlifeoralhealth.com). Physicians and nurse practitioners are the only medical providers recognized by Michigan Medicaid as billable providers. Once completed, the medical provider will receive a certificate of completion and must fill out a contact information form, including license number and NPI number, and submit both to the Michigan Department of Health and Human Services (MDHHS) Oral Health Program. The provider will then be issued a certificate and be eligible to bill Medicaid for reimbursement. MDHHS does not issue a completed certificate to other providers, even though they may not be eligible to bill Medicaid.

*A current list including names and locations of physicians and nurse practitioners that have completed the Smiles for Life training and received a Fluoride Varnish Training Certificate can be found at*

[http://michigan.gov/documents/mdch/Fluoride\\_Varnish\\_Training\\_Certificates\\_278243\\_7.pdf](http://michigan.gov/documents/mdch/Fluoride_Varnish_Training_Certificates_278243_7.pdf).

*As of the time of this publication, 1,122 medical professionals have taken the Smiles for Life training since November 2008, with 523 being physicians or nurse practitioners.*

## **Reimbursement**

Physicians and nurse practitioners that have completed the Smiles for Life training are allowed to bill Medicaid for two oral screenings a year and up to four fluoride varnish applications on a child up to 3-years-old (0-35 months) over a 12 month period. The current reimbursement rate for an oral screening by a medical provider is \$14.89 and is \$9.00 per varnish application.

## **Varnish! Michigan Babies Too! Program Description**

The Varnish! Michigan Babies Too! Program was developed as an incentive for medical providers to have oral health training and begin an oral health program in their practices. This is to encourage referral to a dentist by age one. Free fluoride varnish is available to offices willing to submit oral health screening data collected on children receiving the fluoride varnish application to the MDHHS Oral Health Program (OHP). By providing free fluoride varnish, the OHP hopes to encourage medical providers to perform oral screenings and fluoride varnish applications as part of the EPSDT (Early and Periodic, Screening, Diagnosis, and Treatment) well baby checks and to refer families to a dental home. After each staff member involved has taken the Smiles for Life training, a representative from MDHHS will provide Varnish! Michigan Babies Too! training for all staff involved if they are interested in participating in the Varnish! Michigan Babies Too! Program. This training is offered on-site or via webinar. Once the Varnish! Michigan Babies Too! training has been completed the office can begin to collect data through oral screenings, apply fluoride varnish, educate parents, and submit quarterly screening data to the OHP. The OHP, per signed Memorandum of Agreement with each agency, provides free fluoride varnish for as many children as there are returned screening forms (as long as supply is

available). It is with this information that analysis can be drawn and compared to future health screenings.

## Goals

With the implementation of this program, the OHP has been able to encourage more medical providers to consider oral health an integral part of overall health of the patient. They are now more inclined to take a look in the mouth, provide a caries risk assessment, apply fluoride varnish, offer anticipatory guidance to parents on oral health care, and refer to a dental home by the age of one.

## Data Collection for 2014-2015

Data is collected by medical providers who perform the screening and fluoride applications and record the information. These screening forms are then sent to the OHP where the data is entered into a central database. Once collected and entered, the data is used to determine the size and scale of the Varnish! Michigan Babies Too! Program as well as provide information on the demographics of the population receiving the services.

During the 2014-2015 year, screening forms were collected from 24 agencies from across the state, an increase of eight agencies from the previous year. The screening forms received were from a variety of agencies including hospitals, health departments, clinics, WIC clinics, and primary care offices. Screening Forms were collected by the agencies, sent to the OHP and entered into a database for analysis.

The 2014-15 MDHHS Oral Health Varnish! Michigan Babies Too! Screening Form collected the following information.

- Date of service
- Agency name
- Site name if different from agency name
- Child's name including first, middle, and last
- Child's Date of birth
- Yes/No if the child has seen a dental provider in the last 12 months
- Yes/No if medical history was reviewed/if child is allergic to pine sap
- Parental signature for consent and date of consent
- Gender
- Race/ethnicity
- Primary language
- If the child is limited in any way in any activity because of physical, mental or emotional problems
- Examiner initials

- Total number of teeth present
- # of teeth with previous caries experience
- # of teeth with untreated decay
- Yes/No for white spot lesions present
- Yes/No for Early Childhood Caries (ECC)
- Treatment Urgency: 0) no obvious problems, 1) early dental care, 2) urgent care
- Yes/No for a caries risk assessment
- Yes/No for fluoride varnish application
- Yes/No for child referred for treatment

For FY 2014-15, the data collected was not indicative of the state as a whole and only represents data collected from those agencies volunteering to collect data as part of the Varnish! Michigan Babies Too! Program. The following are the results of the data collected from October 1, 2014 through September 30, 2015:

- 2,128 children were seen
- 2,106 children received at least one oral health screening
- 2,059 (96.8%) children received at least one varnish application
- 320 (15%) children received a second varnish application, 56 (2.6%) received a third varnish application, and 3 (0.1%) children received a fourth varnish application
- 0.37 percent of teeth on children had previous caries treatment at the time of their first screening, and 0.35 percent of teeth on children had previous caries treatment at the time of their second screening
- 0.70 percent of teeth screened had untreated decay at the time of the first screening and 0.45 percent of teeth screened had untreated decay at the second screening
- 3.7 percent of children had white spot lesions present on teeth at the time of the first screening and 3.4 percent had white spot lesions at the time of the second screening
- 3.2 percent of children had signs of Early Childhood Caries (ECC) at the time of their first screening and 3.4 percent of children showed signs at the time of the second screening

Table 1: Comparison of Varnish! Michigan Babies Too! totals between FY 13-14 and FY 14-15

<b>Varnish! Michigan Babies Too!</b>	<b>2013/2014</b>	<b>2014/2015</b>
<b>Children Seen</b>	3,813	2,128
<b>Children Screened</b>	3,813	2,106
<b>Children that received 1<sup>st</sup> varnish application</b>	3,725	2,059
<b>Children that received 2<sup>nd</sup> varnish application</b>	821	320

<b>Children that received 3<sup>rd</sup> varnish application</b>	85	56
<b>Children that received 4<sup>th</sup> varnish application</b>	5	3
<b>Percent of teeth with previous caries treatment at first screening</b>	0.30%	0.37%
<b>Percent of teeth with untreated decay at first screening</b>	0.55%	0.70%
<b>% of children with white spot lesions present</b>	2.4%	3.7%
<b>% of children with early childhood caries</b>	2.9%	3.2%



## Demographics

Average Age at first screening: 1.43 Years

Gender: As seen in the graph below, of the 2,128 babies that were seen in the Varnish! Michigan Babies Too! Program in FY 14-15, 1,096 or 52 percent were male and 1,019 or 48 percent were female, with the other 13 forms not containing a response for gender.

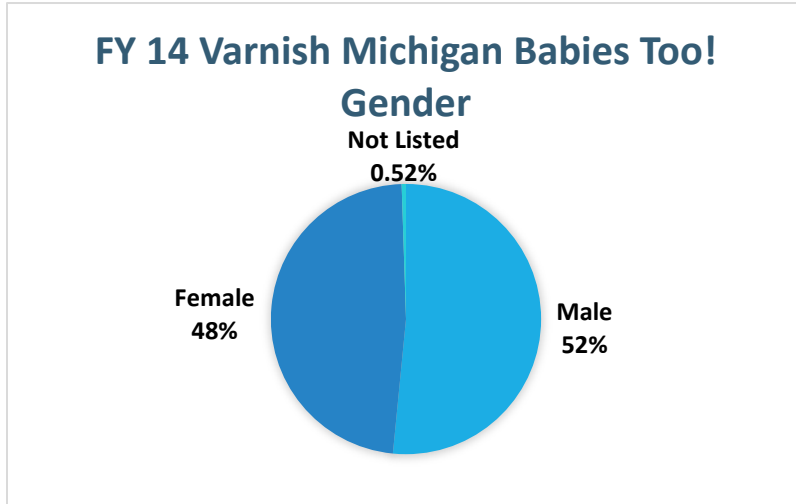


Figure 2: Pie Chart of gender breakdown for Varnish! Michigan Babies Too! Program FY14-15

Ethnicity: The following graph shows the percentage of each ethnicity that was recorded in FY 14-15 for the Varnish! Michigan Babies Too! Program. The largest population of children screened was white (62%), followed by African American (14%) and a combination of multiple ethnicities (8%).

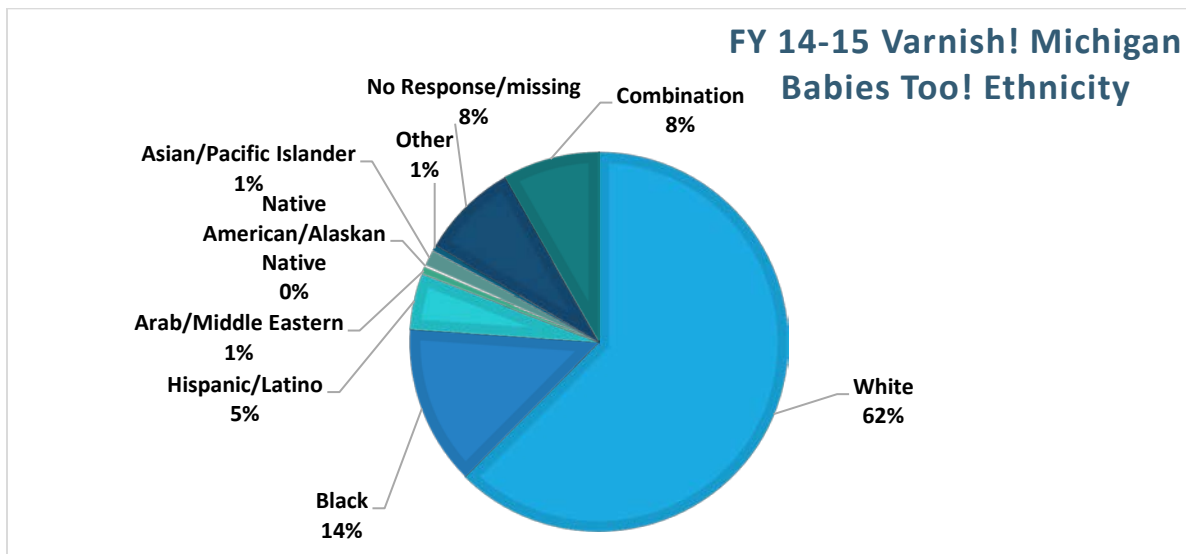


Figure 3: Ethnicity of babies screened in Varnish! Michigan Babies Too! Program FY14-15



**Primary language:** The following graph illustrates the primary language for babies in the Varnish! Michigan Babies Too! varnish program for fiscal year 15. As seen below, over 95 percent of babies screened live in a household with English as the primary language, followed by 2 percent Spanish speaking and less than 1 percent Arabic. Two percent of the screening forms were returned with no response for primary language and 1 percent indicated a language other than those listed.

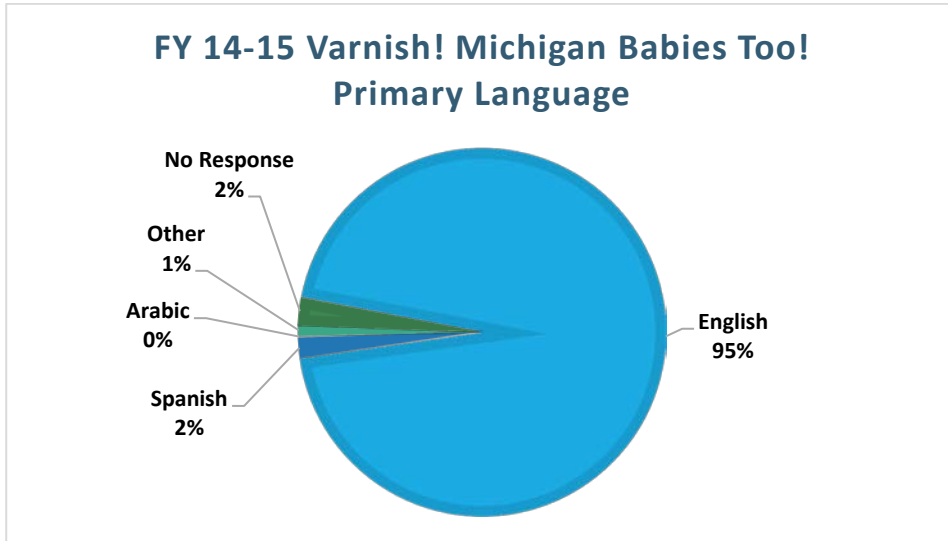


Figure 4: Primary Language of babies in the Varnish! Michigan Babies Too! Program FY14-15

**Disability:** Of the more than 2,128 babies that were screened in the Varnish! Michigan Babies Too! Program in fiscal year 14-15, 24 (1.1%) were recorded as having a disability. Disabilities were categorized as physical, mental, emotional or other and more than one disability could be selected. The following table shows the number of children out of the 24 marked as having a disability with each type of disability.

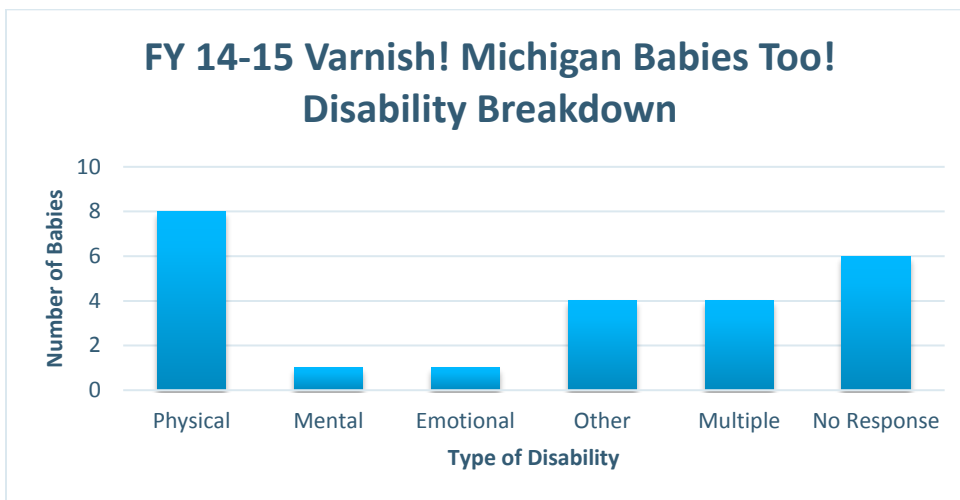


Figure 5: Number of Children with each type of disability in the Varnish! Michigan Babies Too! Program FY14-15

## Lessons Learned

Although the Varnish! Michigan Babies Too! Program has participating medical providers in many counties around the state, it is not considered to be a statewide program. Physicians and other medical providers are not actively recruited to the program and participate on a voluntary basis. Because of this, data from this program cannot be indicative of the statewide levels of fluoride varnish being applied to children's teeth.

As seen in Table 1 above, the overall number of babies and infants that were screened and received fluoride varnish application in Fiscal Year 14-15 dropped compared to Fiscal Year 13-14. This is in part due to discontinuing partnerships with the two largest programs from FY 13-14 because of lack of funding to support them. Even with the drop on overall numbers declining, 96.8 percent of the babies that were screened during FY 14-15 received at least one varnish application.

## Evaluation

The Varnish! Michigan Babies Too! Program is due to undergo a program evaluation in 2016. The Oral Health Program in conjunction with the Michigan Public Health Institute are developing a program survey that will be sent out to all providers that have taken the Varnish! Michigan Babies Too! training. This survey will have questions on four topics; provider characteristics, program implementation, Varnish! Michigan Babies Too! Program training, and program satisfaction. Using this survey, as well as analyzing existing data, the Varnish! Michigan Babies Too! Program will be able to see strengths and weaknesses of the program, whether the providers are satisfied with the program as well as areas for improvement and whether the program is properly training the providers.

## Future of the Program

The Varnish! Michigan Babies Too! Program receives funding from a variety of sources. One source is the oral health contract with the Southeastern Michigan Health Association (SEMHA). This contract has provided steady funding over the last three years. The Altarum Institute grant also provides funding for the Babies Too! Program. As the program continues to add to the number of providers participating and the funding remains constant securing additional funding becomes important to the growth of the program.

Part of the agreement with providers is that the program will continue to provide free varnish to participating agencies while supplies last. This is based on funding availability for the program to continue to supply the fluoride varnish. Changes to the program may be to limit participation of providers for two years. This will be to establish the practice of providing oral screenings to 0-3 year olds during their primary care visits and make it a regular part of the check-ups. Fact

Sheets of program information and updates are regularly sent to participants. To cut costs, the MDHHS Fluoride Varnish brochures will only be sent out to providers that are currently participating in the program. The brochure will also be available as a PDF that can be sent to anyone that requests a copy of it.

The Altarum Institute, as part of the Michigan Caries Prevention Program, trains providers in the Smiles for Life training and sends names and contact information to MDHHS to certify participants to bill Medicaid. Altarum promotes the Babies Too! Program at these trainings. MDHHS and the Oral Health Program hopes to continue the Varnish! Michigan Babies Too! Program into the future. This program helps to increase the knowledge and importance of oral health starting at an early age.

For more information on the Smiles for Life certification process and the Varnish! Michigan Babies Too! Program contact:

**Susan Deming, RDA, RDH, B.S.**  
**Early Childhood Oral Health Coordinator**  
**Michigan Department of Community Health**  
**Oral Health Program**  
**517 373-3624**  
[Demings@michigan.gov](mailto:Demings@michigan.gov)

---

*Respectively submitted by Daniel Albright, MPH*

